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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------|------------------|
| 10/690,239 | 10/21/2003 | Aaron L. Hill | ST8723US | 4927 |
| 22203 | 7590 | 09/27/2006 | EXAMINER | |
| KUSNER & JAFFE HIGHLAND PLACE SUITE 310 6151 WILSON MILLS ROAD HIGHLAND HEIGHTS, OH 44143 | | | JASTRZAB, KRISANNE MARIE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1744 | |

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,239

Applicant(s)

HILL ET AL.

Examiner

Krisanne Jastrzab

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/17/2006 has been entered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et. al. WO 01/21223, in view of Childers U.S. Patent No. 5,906,794.

Martin et. al. teach a vapor decontamination system for decontaminating a defined region, the system comprising: a chamber defining a region (See Figures 1 and 2; sealed chamber 10); a generator for generating a vaporized hydrogen peroxide from a solution of hydrogen peroxide and water (See Figures 1 and 2; See page 5 – preferred that sterilant vapor is hydrogen peroxide and water vapor; liquid sterilant supply 27 and evaporator 26); a closed loop circulating system for supplying the vaporized hydrogen peroxide to the region (See Figures 1 and 2; circulating conduit 12);

a destroyer within the closed loop circulating system for breaking down the vaporized hydrogen peroxide (See Figures 1 and 2; See page 5 – the hydrogen peroxide extracted from the chamber with the circulating gas is subjected to catalytic action to break the hydrogen peroxide down into water vapor and oxygen, the former being extracted from the gas before the gas is recirculated through the enclosure; deactivate sterilant 22); a bypass conduit bypassing the destroyer (See Figures 1 and 2; See page 7 – parallel branches, one of which contains means to heat the gas and means to supply a sterilant vapor or vapors to the gas, e.g. second parallel branch for bypassing deactivate sterilant 22); and a controller operable to cause vaporized hydrogen peroxide from the generator to flow through the closed loop circulating system during pre-determined phases of operation (See page 7 – parallel branches in the circuit one of which contains means to deactivate a sterilant to be added to the carrier gas flowing through the circuit and means to dehumidify the gas and the other of which branches contains means to heat the gas and means to supply a sterilant vapor or vapors to the gas; See pages 11-12).

Childers teaches a vapor decontamination system for decontaminating a defined region, the system comprising: a chamber defining a region (See Figure 6; See col. 5, lines 45-47 – sealable chamber 10 having an inlet port 12 and an outlet port 14); a generator for generating a vaporized hydrogen peroxide from a solution of hydrogen peroxide and water (See Figure 6; See col. 5, lines 51-58 – liquid sterilant vaporizer unit 18); a closed loop circulating system for supplying the vaporized hydrogen peroxide to the region (See Figure 6; See col. 5, lines 43-50 – conduit circuit 16 fluidly connected to

Art Unit: 1744

the chamber ports to provide a closed-loop flow path for recirculating a carrier gas into, through, and out of the chamber 10); a destroyer within the closed loop circulating system for breaking down the vaporized hydrogen peroxide (See Figure 6; See col. 5, lines 59-65 – converter 20); and a controller operable to cause vaporized hydrogen peroxide from the generator to flow through the closed loop circulating system during pre-determined phases of operation (See Figure 6; See col. 6, line 58 to col. 7, line 13 – processing unit 42).

Both references teach the recognized importance of maintaining the sterilant vapor concentration at an optimal level during sterilization flow. Childers further teaches that excess moisture can deter the vaporization of the sterilant and has placed the air dryer in a bypass configuration to maintain optimal conditions. Martin emphasizes retaining given sterilant concentrations during given phases in the process. It would have been obvious to one of ordinary skill in the art to configure the converter/sterilant destroyer of Martin et al., in a controlled closed circuit system with a by-pass circuit, as the air dryer in Childers is, because it would provide for optimized re-cycling of the sterilant and provide accurate control of the concentration during all phases of the sterilization process.

Response to Arguments

Applicant's arguments filed 7/17/2006 have been fully considered but they are not persuasive.

Applicant argues that Childers does not teach a sterilant destroyer in a bypass line, however the Examiner never asserts that Childers does, but that Childers teaches

the effective use of bypass means for flow control in a circulating sterilizer and it is the combination with Martin that provides a destroyer in a by pass loop. Applicant further argues that there is no motivation to substitute the destroyer of Martin for the dryer of Childers, but again the Examiner never set forth such substitution, rather that the destroyer of Martin be configured in a by-pass loop as taught in Childers. The motivation for the construction is clearly set forth in the rejection, namely maintaining the sterilant vapor concentration at an optimal level during sterilization flow.

Applicant further argues that the motivation stated in the rejection is not proper because it is not "directly relevant" to the present invention. The Examiner would point out that there is no requirement that the motivation for a rejection parallel the purpose of the instant invention, rather it is required that the motivation is relevant to the teachings of the references applied, which is the case in the rejection above. The motivation stated in the rejection above proper combines the references to achieve the structure instantly claimed. The motivation to combine references does not have to be the same as Applicant's intended purpose for the invention.

Further, Applicant argues that the 3-way valve of Childers allows partial flow through both loops, and does not cause "substantially all" of the flow to bypass the destroyer, however, the Examiner would disagree and point out that even Applicant's own argument notes that the valve functions to "vary the flow" and the Examiner would maintain that it is fully capable of varying the flow such that all of the flow is sent in one direction and none in the other thereby clearing meeting the structural limitations of Applicant's instant claims.

Art Unit: 1744

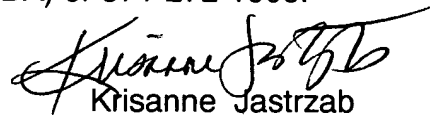
Finally, it is further noted that Applicant has argued operation or function of the apparatus, however, the instant claims are directed to the apparatus itself and the outstanding rejection properly combines the structures of the prior art to meet the instantly claimed structural limitations.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisanne Jastrzab whose telephone number is 571-272-1279. The examiner can normally be reached on Mon.-Thurs. 6:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Krisanne Jastrzab
Primary Examiner
Art Unit 1744

September 20, 2006